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Factors involved in the intent to move from one team to another among handball players

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The study was about a non normative within-career transition in sport: Handball players' move from their current to an alternative team. Eighty male handball players were presented with scenarios that contained five pieces of information about current satisfaction with the present team, attractiveness of the alternative team (better springboard for future career than the current team, better wages), perceived probability of being hired, and presence of a network of friends. Although all the factors were taken into account for judging the intent to move in each situation, the springboard and localization-wage factors impacted more than the other factors.

Career transitions in sport have been extensively studied during the last decade (Lavallee & Wylleman, 2006). Most studies, however, have focused on career termination (Alfermann & Stambulova, 2007; Cecic Erpic, Wylleman, & Zupancic, 2004; Wylleman, Alfermann, & Lavallee, 2004). It is only recently that studies examining within-career transitions have been conducted.

Pummel, Harwood and Lavallee (2008) examined the perceptions of young English event riders who had recently made a transition from club level to regional level. Five categories of perception were identified: motivations for the transition (e.g., to exceed family achievements, to be seen), perception of the transition itself (e.g., standard of performance perceived as much higher, transition as a fantastic experience), stress

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associated with the transition (e.g., feeling that the new competitors are superior, lack of teacher understanding), support for athletic development (e.g., parents provide transport, school proud of achievements), and post-transition changes (e.g., experience of more respect from organization, wide range of friends). Bruner, Munroe-Chandler and Spink (2008), using a phenomenological approach, examined the transitioning experience of eight young rookie ice hockey players entering elite sport. These young athletes evoked two different types of transitional challenges: one that is associated with sport performance, and one that is associated with interpersonal relationships and personal development.

THE PRESENT STUDY

The present study is about a specific within-career transition: Handball players' move from their current team to an alternative, more attractive team. More specifically, the study examines the factors that are likely to affect players' intent to move from one team to another. The first reason to study this topic is societal in character. Players' mobility is an omnipresent and well publicized phenomenon in the field of team sport. On a regular basis, we are informed by the TV news that a well-known team sport player has moved from one club to another, and that the move has been associated with surprisingly huge amounts of money. The second reason is psychological in character. According to Stambula, Alfermann, Statler and Côté (2009), changing teams or clubs can be considered as a non-normative transition. In other words, it is a much less predictable transition than a normative transition such as passing from club level to regional level. Several times during their career, handball players may be led to wonder about a possible moving to another team as a result of breach and non-extension of contract or when their contract expired. This period of sports life is not easy to manage for athletes. This kind of transition may involve complex decision processes because numerous factors of all kinds must be considered, balanced and integrated. A bad decision can have non-negligible consequences on players' future employment. Knowing what kind of factors are considered as determinant, and what kind of factors are not may be of prime interest for sport counsellors and sports psychologists who are, at least in theory, charged of helping players to solve these difficult issues in the best way possible.

The present study is aimed at assessing the impact of several of these multiple factors on players' intent of mobility. Based on previous interviews with seven handball players who had recently moved from one team to another, we decided to consider five factors. The first one is the wage

differential between teams. This factor was mentioned by all interviewees. In fact, it is a classical factor in all mobility studies since the first theoretical models of workers' mobility (Ravenstein, 1889; Smith, 1776). In these early models, the decision to move was conceived as depending mainly upon one factor, namely the wage differential between regions. The only other factor entering into the model was the cost of movement, especially when borders must be crossed. This factor has repeatedly found to be a predictor of mobility (e.g., Kennan & Walker, 2010).

The second factor that is considered in the present study was the perceived probability of being hired. This factor, which was mentioned by most interviewees, is also a classical one in most mobility studies. In Harris and Todaro's (1970) view, mobility, rather than being determined by wage differential alone as in Ravenstein's theoretical model is determined by the *expected* wage differential; that is, the wage differential x probability of finding a job product. The probability x wage differential interaction has been empirically observed in several empirical studies (e.g., Neto & Mullet, 1998).

The third factor is the presence of friends in the new team. This factor was mentioned by several interviewees. It is a newcomer in the mobility literature. It has recently been introduced by Massey and España (1987) under the label of "network". Existing network ties lower the risks associated with the move because individuals can expect help from people they know. This social factor has been empirically found to be a predictor of mobility (e.g., Dahl & Sorenson, 2010).

The fourth factor that is considered in the present study was the level of satisfaction-dissatisfaction with the present team. This factor has been mentioned by several interviewees. It is highly reminiscent of Zimmerman's (1996) Push factor. Push factors are essentially internal to persons (Mullet, Dej, Lemaire, Raïff, & Barthorpe, 2000). In the particular situation of professional athletes of team sports, this factor may express the feeling of unease that a player can begin to experience after having been a member of the same team for many years or after an alteration of the team's coach. Literally, the player feels pushed out of the current team. The more the player feels pushed out, the stronger the player's intent to move. This factor has been found to be a predictor of athletes' decisions to retire (Fernandez, Stephan, & Fouquereau, 2006).

The last factor that is considered is the perception that the new team is a better springboard than the current team in order to evolve to a top level professional career. This factor was mentioned by all interviewees, and some of them insisted that it was the main factor explaining their decision. This factor is reminiscent of Zimmerman's Pull factor. Pull factors, in

contrast with Push factors, are associated with the alternative options, in this case, the alternative team(s) that can reasonably be considered. Literally, other teams seem to irresistibly attract the player because they are more prestigious. The higher their perceived attractiveness, the stronger the player's intent to move.

In summary, the present study is specifically aimed (a) at determining which factor or group of factors – localization-wage differential, probability of being hired, presence of a network of friends, dissatisfaction with current team, and prestige associated with new team, has the largest impact on the players' intent to move, and (b) at delineating which kind of mental combination of information rule players implement when confronted with this kind of decision.

METHOD

Participants. The participants were 80 male volunteer handball players living in France: 40 members of Handball National League (HNL, the first French league) teams, aged 18-36 ($M = 27$), and 40 members of training centres aged 16-20 ($M = 18$) playing in the fourth French league. The players from HNL teams were professionals earning their living from sport. They practiced 20 hours a week. They knew the issue of moving from one team to another well because as such they were professional players, they were at least one time to be employed on a fixed-term contract and so they have been confronted with the appropriateness to move to their future team. The members of the training centres practiced 10 hours a week. They just started to earn some money, and aspired to become professionals. They had not been confronted with the issue of mobility from one team to another prior to the study.

Material. The materials consisted of 72 cards showing a short scenario of some lines and a response scale. Each story contained five pieces of information that were presented in the following order: (a) the current feeling of ease or unease at being a member of the current team (b) the attractiveness of the alternative team, in terms of being or not being a better springboard, likely to promote the future player's career more than the current team, (c) the localisation of the alternative team and the wage differential (foreign team offering the same wage, French team offering the same wage, or foreign team offering twice the current wage), (d) the existence of a network of friends in the alternative team (presence of some

friends versus knowing nobody), and (e) the subjective probability of being hired in the alternative team (probability of 10%, 40% and 70%).

The scenarios represented all the possible combinations of the levels of these five factors: 2 x 2 x 3 x 2 x 3 = 72 stories. One typical story was the following: "Mael is a professional handball player and a member of Team G. Currently, he isn't feeling well in this team for a number of reasons, and he thinks he is at a turning point in his career. Leaving Team G, and becoming a member of Team H would be good for his career because this foreign team is a dynamic one. Team H seems to be a better stepping-stone than the current team. If Mael was a member of Team H, he would, however, be offered more or less the same amount of money than what he currently earns as a member of Team G. Mael knows several players in Team H, players with whom he is on good terms. Given his current technical level, Mael estimates that the probability of being hired into Team H. is about 7 chances in 10. If you were Mael, to what extent do you think that you would contact the leaders of Team H?" Under each story was a 10-point response scale with "I will surely not contact them" as the left anchor and "I will surely contact them" as the right anchor.

These scenarios were first shown to a group of three handball players who were instructed to judge how valid the situations are for them. None of the 72 situations depicted in the scenarios was considered as unlikely.

Procedure. The participants were interviewed in 2009. They responded individually, generally before or after sports training. They were instructed to read the scenarios (that were presented in random order) once at a time, to try to identify with the player who was depicted in each scenario, and to express a rating along the response scale. There were two phases: a familiarisation phase and an experimental phase (see Anderson, 2008; Pâques, Fruchart, Dru, & Mullet, 2005). During the familiarisation phase, each participant was presented with eight scenarios taken randomly from the set of 72. Each story was read aloud, and the participant provided ratings. At the end of this phase, the participants were given an opportunity to compare their responses and make changes if necessary.

During the second or experimental phase, the participants were presented with the whole set of 72 scenarios. They provided the ratings at their own pace but they were not allowed to compare their responses or to go back and make changes as in the familiarisation phase. The session lasted about one hour.

RESULTS

An analysis of variance using a Group x Probability x Network of Friends x Localization-Wages Differential x Springboard x Feeling of Unease, 2 x 3 x 2 x 3 x 2 x 2 design, was conducted on the ratings. The effect of the between-subject factor Group was not significant, and none of the interactions involving this factor were significant. As a result, a second, simpler ANOVA, using a Probability x Network of Friends x Localization-Wages Differential x Springboard x Feeling of Unease, 3 x 2 x 3 x 2 x 2 design, was conducted. Owing to the great number of comparisons (31), the significance threshold was set at .001 (.05/31=.0016). The results are shown in table 1.

The five within-subject factors were all statistically significant. The strongest effect was observed for Springboard. The more the alternative team appeared as a better springboard, the higher the intent to change. Also, the higher the wage differential, the higher the intent to change. Subsequent planned comparisons showed that the difference between the first two levels of this factor (same wages in a foreign country and same wages in France) was not significant.

The stronger the network of friends in the new team, the higher the level of intent to change. The higher the probability of being hired, the higher the level of intent. Finally, the better the player felt himself in the current team, the lower the level of intent.

Figure 1 shows three of these effects: probability of being hired (curves are regularly ascending), localization-wages (curves are separated), and springboard (curves in the right panel are higher than curves in the left panel). It also shows the Springboard x Probability interaction. This interaction was the only one that was significant at the chosen threshold. In particular, when the alternative team was considered a better springboard, the effect of probability on intent to move was stronger than when the alternative team was not considered a better springboard.

DISCUSSION

All the factors that were considered in the present study had a strong impact on the players' intent to move. The Springboard factor and the Localization-Differential Wage factor impacted more than the three other factors but in general all factors that could be considered as important.

Table 1. Results of the ANOVA for the factorial design Probability x Network of Friends x Localization-Wages Differential x Springboard x Feeling of Unease.

Factor	Effect df	Effect MS	Error df	Error MS	F	p	η^2_p
Probability (P)	2	1 864.71	158	16.23	114.87	.001	.59
Network of Friends (F)	1	1 166.40	79	9.45	123.46	.001	.61
Localization-Wages Differential (W)	2	2 131.22	158	9.69	220.03	.001	.74
Springboard (S)	1	13 026.08	79	48.13	270.66	.001	.77
Feeling of Unease (U)	1	2 830.81	79	25.55	110.81	.001	.58
P x F	2	10.85	158	1.86	5.83	.004	.06
P x W	4	11.01	316	2.51	4.38	.002	.05
F x W	2	1.33	158	2.18	0.61	.545	.00
P x S	2	50.22	158	4.65	10.80	.001	.12
F x S	1	0.40	79	2.32	0.17	.679	.00
W x S	2	16.27	158	3.32	4.90	.009	.05
P x U	2	1.98	158	2.51	0.79	.457	.00
F x U	1	10.34	79	2.38	4.34	.041	.05
W x U	2	7.28	158	2.75	2.64	.074	.03
S x U	1	66.31	79	5.80	11.43	.002	.12
P x F x W	4	8.76	316	2.21	3.96	.004	.04
P x F x S	2	3.01	158	1.79	1.68	.190	.02
P x W x S	4	7.21	316	2.44	2.95	.005	.03
F x W x S	2	0.21	158	2.60	0.08	.920	.00
P x F x U	2	6.67	158	2.76	2.41	.093	.02
P x W x U	4	8.00	316	2.76	2.90	.022	.03
F x W x U	2	1.11	158	2.20	0.51	.604	.00
P x S x U	2	0.90	158	2.26	0.40	.671	.00
F x S x U	1	23.00	79	3.32	6.93	.010	.08
W x S x U	2	11.62	158	2.80	4.16	.172	.04
P x F x W x S	4	6.88	316	2.45	2.81	.026	.03
P x F x W x U	4	1.82	316	2.63	0.69	.598	.00
P x F x S x U	2	2.62	158	1.95	1.35	.263	.01
P x W x S x U	4	1.23	316	2.10	0.59	.674	.00
F x W x S x U	2	1.08	158	1.85	0.59	.558	.00
P x F x W x S x U	4	8.66	316	2.31	3.74	.005	.04

Two factors interacted: Probability of being hired and Springboard. This interaction is of theoretical interest because it was typically the kind of Probability x Utility interaction that was advocated by Harris and Todaro (1970), and repeatedly found by authors working in the field of workers' mobility (e.g., Neto & Mullet, 1998). When the alternative team is considered as a better springboard, the information in terms of probability of being hired is given more importance than when the alternative team is not considered as a better springboard.
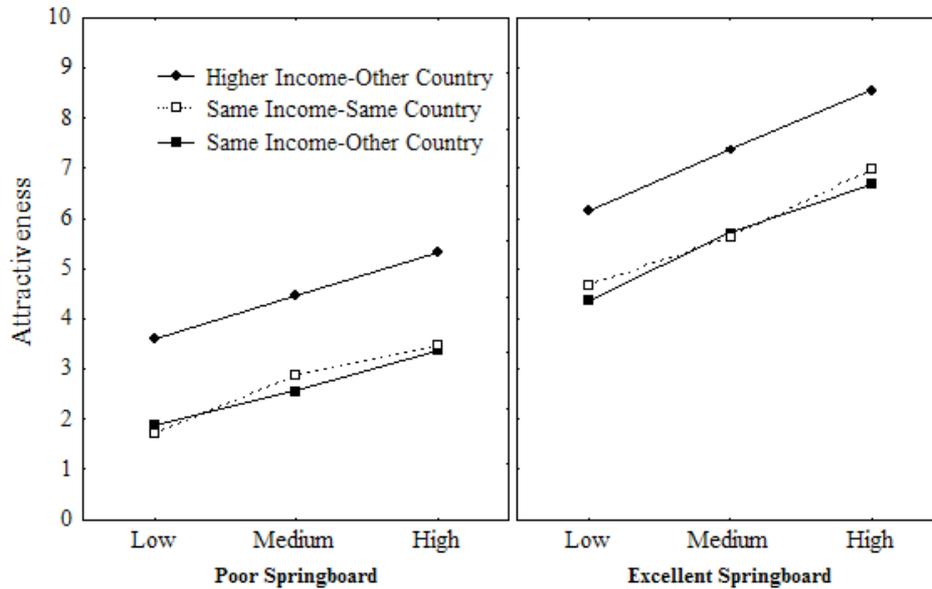
Figure 1: Intent to move as a function of springboard, probability of being hired (low, medium, high), and wage differential.

As a result, one convenient way of synthesizing the current findings is through the following equation: Intent to Move = (Probability x Springboard) + Localization-Wage differential + Network + Unease. In other words, the intent to move, and probably the decision to move itself, may be a complex mental process involving many kinds of information. This equally applies to professional players who are members of top level teams (NHL), and to young players still training in sports centers. This finding was consistent with the basic fact that, for players in general, moving from one team to another is not simply a normative, automatic transition (Stambula et al., 2009). Most of the time, at least in handball, the athlete has the initiative and the responsibility for this specific transition. The risks and the benefits of these non-normative transitions are both high. As a result, the decision process must be a very balanced one.

The main limitation of our study lies in the factor Localization-Wages Differential. We should have dissociated one factor Localization and one factor Wages Differential because the present design does not allow us to compare clearly our results with the results of Ravenstein (1989) and Harris and Todaro (1970) who found a wage x probability interaction.

Indeed, the effect of country can not be discerned as it is confounded with income and the effect of wages can not be discerned as it is confounded with country due to the design of the experiment. We joined these two factors in order to reduce the number of combinations from the factorial design since this is often a reason which leads nonbelievers to reject functional measurement methodology and results.

Another limitation in the study is that the impact of each factor has only been assessed in terms of their effect size; that is, in terms of partial eta squared. As partial eta squared is in part determined by the choice of the stimuli, this measurement cannot fully be considered as a relative measure of importance of the factors. In future studies, the relative importance of each factor should be measured using more adequate techniques (see Vidotto & Vicentini, 2007).

Future studies on players' mobility should incorporate factors that were not considered in the present study, for instance (a) the professional situation of the spouse (see Mincer, 1978) or (b) the number of previous (successful and unsuccessful) moves from one team to another (Taris & Feij, 1999). They could involve not only male players but also female players (see Del Bono & Vuri, 2010), consider other team sports than handball (e.g., football, basketball, athleticism), and include the players' experience about making transfers from one team to another team, and consider the role of sports agents. Finally, it may be worthwhile to investigate whether individual differences exist in the way sportsmen value and integrate the different factors (see Hofmans & Mullet, in press).

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